

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-52. (Cancelled)

53. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device, the haptic-feedback device being configured to provide input data to an associated graphical environment; and

filtering the input ~~sensor~~-data only when the haptic-feedback signal causes ~~the~~ outputting of haptic feedback, the filtering based on the haptic-feedback signal to produce the input data operative to reduce visual disturbance to a user controlled graphical object displayed in the associated graphical environment, wherein the filtering input data further includes identifying the visual disturbance in response to the outputting of haptic feedback.

54. (Cancelled)

55. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device; and

filtering ~~sensor~~ input data by time-averaging the ~~sensor~~ input data to create filtered input data, the filtering also based on the haptic-feedback signal to produce the filtered input data operative to reduce visual disturbance to a user controlled graphical object displayed in [[the]] an associated graphical environment, the haptic-feedback device being configured to provide the filtered input data to [[an]] the associated graphical environment, wherein the filtering input data

further includes identifying the visual disturbance in response to the outputting of haptic feedback.

56. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device, the haptic-feedback device being configured to provide input data to an associated graphical environment; and

filtering ~~sensor~~ the input data to produce a held data value, the filtering including sampling and holding ~~a data value derived from the sensor data~~ based on a movement of the haptic-feedback device without output of haptic feedback, the input data including the held data value, the filtering also based on the haptic-feedback signal to produce the input data being operative to reduce visual disturbance to a user controlled graphical object displayed in the associated graphical environment, wherein the filtering the input data further includes identifying the visual disturbance in response to the movement of the haptic feedback device with the output of the haptic feedback.

57-60. (Cancelled)

61. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device;

outputting haptic-feedback based on the haptic-feedback signal;

generating sensor data in response to sensing of the haptic feedback;

filtering sensor data to produce input data according to a disturbance filter process including time-averaging the sensor data, the disturbance filter process being associated with the haptic feedback, the sensor data being based on a movement of the haptic-feedback device during

the outputting of the haptic feedback, the filtering of the sensor data operative to reduce disturbance to a user controlled graphical object displayed in an associated graphical environment caused by the output of the haptic feedback; and

updating the associated graphical environment based on the input data.

62-65. (Cancelled)

66. (Currently Amended) An apparatus comprising:

an actuator configured to receive a haptic-feedback signal, the actuator configured to produce haptic feedback based on the haptic feedback signal;

a sensor coupled to the actuator, the sensor configured to detect a movement of the actuator sensor; and

a filter configured to receive sensor data from the sensor and to provide input data to an associated graphical environment based on the haptic-feedback signal, the filter being configured to receive a command from a processor in communication with the filter to activate the filter, the filter being configured to reduce undesired display effects associated with force sensation in a graphical environment.

67-68. (Cancelled)

69. (Previously Presented) The method of claim 53, further comprising determining a position of a graphical object in the associated graphical environment based on the input data.

70. (Previously Presented) The method of claim 53, further comprising sending the input data to a processor.

71. (Currently Amended) The method of claim 53, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and the filtering the ~~sensor~~ input data being performed by a processor local to the haptic-feedback device.

72. (Currently Amended) The method of claim 53, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and the filtering the ~~sensor~~ input data being performed by a processor configured to control the associated graphical environment, the processor configured to be in communication with the haptic-feedback device.

73. (Previously Presented) The method of claim 53, wherein the outputting the haptic feedback is configured to be correlated with data values associated with an event in the associated graphical environment.

74. (Currently Amended) The method of claim 53, wherein the filtering includes sampling the ~~sensor~~ input data over time according to a sampling rate.

75. (Currently Amended) The method of claim 53, wherein the filtering includes time-averaging the ~~sensor~~ input data to produce filtered input data.

76. (Currently Amended) The method of claim 53, wherein the filtering includes sampling and holding a data value derived from the ~~sensor~~ input data based on a movement of the haptic-feedback device to produce a held data value, the input data includes the held data value.

77. (Previously Presented) The method of claim 53, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

78. (Previously Presented) The method of claim 53, further comprising updating a position of a graphical object in the associated graphical environment based on the input data.

79. (Previously Presented) The method of claim 55, further comprising determining a position of a graphical object in the associated graphical environment based on the input data.

80. (Previously Presented) The method of claim 55, further comprising sending the input data to a processor.

81. (Currently Amended) The method of claim 55, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and the filtering the ~~sensor~~ input data being performed by a processor local to the haptic-feedback device.

82. (Currently Amended) The method of claim 55, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and the filtering the sensor input data being performed by a processor configured to control the associated graphical environment, the processor configured to be in communication with the haptic-feedback device.

83. (Previously Presented) The method of claim 55, wherein the outputting the haptic feedback is configured to be correlated with data values associated with an event in the associated graphical environment.

84. (Previously Presented) The method of claim 55, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

85. (Previously Presented) The method of claim 55, further comprising updating a position of a graphical object in the associated graphical environment based on the input data.

86. (Previously Presented) The method of claim 56, further comprising determining a position of a graphical object in the associated graphical environment based on the input data.

87. (Previously Presented) The method of claim 56, further comprising sending the input data to a processor.

88. (Currently Amended) The method of claim 56, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and the filtering the ~~sensor~~ input data being performed by a processor local to the haptic-feedback device.

89. (Currently Amended) The method of claim 56, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and the filtering the ~~sensor~~ input data being performed by a processor configured to control the associated graphical environment, the processor configured to be in communication with the haptic-feedback device.

90. (Previously Presented) The method of claim 56, wherein the outputting the haptic feedback is configured to be correlated with data values associated with an event in the associated graphical environment.

91. (Previously Presented) The method of claim 56, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

92. (Previously Presented) The method of claim 56, further comprising updating a position of a graphical object in the associated graphical environment based on the input data.

93. (Previously Presented) The method of claim 61, further comprising determining a position of a graphical object in the associated graphical environment based on the input data.

94. (Previously Presented) The method of claim 61, further comprising sending the input data to a processor.

95. (Previously Presented) The method of claim 61, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and the filtering the sensor data being performed by a processor local to the haptic-feedback device.

96. (Previously Presented) The method of claim 61, further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and the filtering the sensor data being performed by a processor configured to control the associated graphical environment, the processor configured to be in communication with the haptic-feedback device.

97. (Previously Presented) The method of claim 61, wherein the outputting the haptic feedback is configured to be correlated with data values associated with an event in the associated graphical environment.

98. (Previously Presented) The method of claim 61, wherein the filtering includes executing a driver on a computer configured to be in communication with the haptic-feedback device.

99. (Previously Presented) The method of claim 61, further comprising updating a position of a graphical object in the associated graphical environment based on the input data.

100. (Previously Presented) The apparatus of claim 66, further comprising a processor local to the haptic-feedback device, the processor configured to output the haptic feedback based on the haptic-feedback signal.

101. (Previously Presented) The apparatus of claim 66, further comprising a processor in communication with the haptic feedback device, the processor configured to control the associated graphical environment and output the haptic feedback based on the haptic-feedback signal.